

Claims

1. A network device which includes means for receiving data packets over a link, a memory for the packets, means for providing an indication that the occupancy of the memory is less than a first watermark, and means responsive to said indication for providing a sequence of pause frames wherein said pause frames in the sequence define for a source of said packets alternating periods in which sending of packets on the link is alternately allowed and prevented.

2. A network device according to claim 1 wherein said pause frames consist of an alternating sequence of XOFF frames defining a very long cessation of the sending of packets and XON frames defining substantially zero cessation of the sending of packets.

3. A network device according to claim 1 wherein said means for providing said pause frames is responsive to the increase of the occupancy of the memory above a selected watermark to cease the provision of said sequence of pause frames.

4. A network device according to claim 3 wherein the aforementioned watermarks are the same.

5. A network device according to claim 1 wherein the means for providing pause frames is responsive to an indication that the occupancy of the memory is above a second watermark to send at least one pause frame prescribing cessation of the sending of packets on the link by the source.

6. A network device which includes means for receiving data packets over a link, a memory for the packets, means for providing an indication that the occupancy of the memory is less than a first watermark, and means responsive to said indication for providing a sequence of pause frames comprising an alternating sequence of XOFF frames defining a very long cessation of the sending of packets and XON frames defining substantially zero cessation of the sending of packets wherein said means for providing

said pause frames is responsive to the increase of the occupancy of the memory above a selected watermark to cease the provision of said sequence of pause frames.

5 7. A network device according to claim 6 wherein the first and selected watermarks are the same.

10 8. A network device according to claim 6 wherein the means for providing pause frames is responsive to an indication that the occupancy of the memory is above a second watermark to send at least one pause frame prescribing cessation of the sending of packets on the link to the device.

11 9. A network device according to claim 6 wherein the means for providing pause frames is responsive to an indication that the occupancy of the memory is above a second watermark to send at least one pause frame prescribing cessation of the sending of packets on the link to the device.